

ABSTRACT

A transmissionless variable output pumping unit comprising a multiple crankshaft pump driven by a prime mover. The apparatus includes an adjustment mechanism for adjusting a phase angle between first and second crankshafts. Plungers in the pump are disposed in cylinders forming part of a pumping chamber. When the phase angle is at a minimum, the plungers operate together for maximum discharge from the pump. When the phase angle is at a maximum, the plungers operate substantially opposite one another for zero discharge. The phase angle may be infinitely adjusted between the minimum and maximum.